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### **REMARKS**

# INTRODUCTION

In accordance with the foregoing, claim 1 has been amended.

No new matter has been submitted, and reconsideration of the allowability of the pending claims is respectfully requested.

Claims 1-20 are pending and under consideration.

#### **OBJECTION TO CLAIM 1**

In accordance with the Examiner's request for correction of an antecedent informality in claim 1, applicants have amended claim 1 to correct this informality. Entry of this amendment is respectfully requested.

## REQUEST FOR NEW OFFICE ACTION

The rejections of claims 18-20 are based upon the primary reference <u>Jeon et al.</u>, U.S. Patent No. 6,014,178.

However, the rejections do not refer to <u>Jeon et al.</u>, but rather reference <u>Devaney</u>, U.S. Patent No. 6,357,045. Thus, there would appear to be an error in these rejections.

A new Office Action clarifying the outstanding rejection of claims 18-20 is respectfully requested.

In addition, as noted below, <u>Jeon et al.</u> has the same assignee as the current application, and therefore is not a proper reference under 35 USC 103(C). Accordingly, if claims 18-20 are being rejected based upon a modification of <u>Jeon et al.</u>, it is respectfully submitted that these rejections are improper.

Lastly, in view that claims 1-17 had previously stood allowed, and the outstanding rejection of claims 1-17 is the first opportunity applicants have had to address the proffered combination of references and underlying obviousness rejection, applicants further request that the next Office Action be a non-final Office Action.

# **REJECTION UNDER 35 USC 103**

Claims 1-5 and 7-17 stand rejected under 35 USC 103 as being obvious over <u>Bestler et al.</u>, U.S. Patent No. 5,638,112, in view of <u>Cummins et al.</u>, U.S. Patent No. 5,784,120, and <u>Devaney</u>, U.S. Patent No. 6,357,045. This rejection is respectfully traversed.

The outstanding Office Action appears to indicate that <u>Bestler et al.</u> sets forth all the claimed features of independent claims 1, 5, and 11.

However, the Office Action would appear to have treated claims 1, 5, and 11 as having similar scope and breadth, while applicants respectfully submit that each claim has differing scope and breadth.

As only an example, independent claim 1 separately sets forth "transmitting additional information overlapped with the MPEG processed video signal separated from the digital broadcast signal," when a digital broadcasting channel is selected, and "extracting a synchronous signal from the received analog broadcasting signal, encoding predetermined additional information according to the extracted synchronous signal..., transmitting the predetermined additional information overlapped with the analog broadcasting video signal separated from the analog broadcasting signal," when the analog broadcasting channel is selected.

Independent claims 5 and 11, also only as examples, differently set forth that the synchronous signal is separated from the analog broadcasting signal and thereafter indicate that a video encoder encodes, when a digital broadcasting signal is selected, "MPEG processed video signal and the additional information into an encoded analog video signal according to ... the synchronous signal," as recited in claim 5, and "encode a video signal from the digital broadcasting signal and the additional information according to the separated synchronous signal," as recited in claim 11.

Here, it is respectfully submitted that the presently claimed invention may have been oversimplified in the outstanding Office Action, i.e., the outstanding Office Action appears to have taken an interpretation of claimed invention as being merely a hybrid tuner that can extract a synchronous signal from an analog broadcasting signal and which can transmit additional information overlapped with an analog broadcasting video signal, e.g., as set forth in the Office Action rejection of claim 1.

However, each of claims 1, 5, and 11 set forth separately differentiating features and aspects not disclosed or suggested by the relied upon references, or combination thereof.

Again, only as an example, regarding claim 1, the Office Action would appear to have not addressed the claimed <u>encoding</u> of the "predetermined additional information according to the extracted synchronous signal."

The Office Action would not appear to have indicated which reference discloses or suggest at least this encoding of the predetermined additional information.

Here, again, the predetermined additional information is encoded based upon the synchronous signal extracted from the analog broadcasting signal.

Conversely, on page 4 of the Office Action, the Office Action sets forth <u>both</u> that <u>Bestler et al.</u> sets forth the claimed extracting of the synchronous signal, and thereafter indicates that <u>Bestler et al.</u> fails to disclose the same, relying on <u>Cummins et al.</u> to disclose the same.

Here, <u>Cummins et al.</u> merely discusses a method for using an extracted synchronous signal during a re-sampling in an Analog-to-Digital (ADC) conversion of an input analog video signal.

However, this ADC conversion would not appear to have any relevance to an "encoding" of any additional information. In addition, <u>Cummins et al.</u> does not appear to disclose or suggest "encoding" additional information based upon the extracted synchronous signal.

Similarly, <u>Bestler et al.</u> would not appear to disclose or suggest either encoding additional information or encoding additional information based upon a synchronous signal.

Neither <u>Bestler et al.</u> nor <u>Cummins et al.</u> would appear to need or desire to encode additional information when an analog broadcasting signal is selected. Further, neither would appear to disclose or suggest encoding the additional information based upon a synchronous signal extracted from the analog broadcasting signal.

To disclose the claimed transmitting of the predetermined additional information overlapped with the analog broadcasting signal, the Office Action further relies upon <u>Devaney</u>, citing a portion of <u>Devaney</u> that discusses overlaying caption information overlaid on scenes.

However, similar to above, <u>Devaney</u> would not appear to discuss the overlaying of <u>encoded</u> predetermined additional information when an analog broadcasting signal is selected. <u>Devaney</u> would appear to be focused primarily on digital broadcasting signals.

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In addition, Devaney similarly would appear to fail to disclose or suggest that such additional information encoding was performed based upon an extracted synchronous signal from the analog broadcasting signal. See Devaney in col. 4, lines 5-12, which would appear to support <u>Devaney</u> actually teaching away from such encoding of additional information.

Thus, it is respectfully submitted that none of Bestler et al., Cummins et al., or Devaney disclose or suggest the claimed encoding predetermined additional information based upon an extracted analog broadcasting signal synchronous signal, when an analog broadcasting signal is selected, and transmitting that encoded predetermined additional information overlapped with the analog broadcasting video signal.

Similarly, regarding independent claims 5 and 11, none of Bestler et al., Cummins et al., or Devaney disclose or suggest extracting a synchronous signal from an analog broadcasting signal and then using that extracted synchronous signal during a video encoding of an MPEG processed video signal and additional information, as set forth in claim 5, or encoding the video signal from the digital broadcasting signal and the additional information based on the extracted synchronous signal, as set forth in claim 11.

Here, it is again noted that the synchronous signal is extracted from the analog broadcasting signal and then used during the encoding of a video signal of the digital broadcasting signal and additional information.

None of Bestler et al., Cummins et al., or Devaney disclose or suggest at least these claimed features.

Accordingly, it respectfully submitted that Bestler et al., Cummins et al., and Devaney, alone or in combination, fail to disclose or suggest the presently claimed invention as set forth in independent claims 1, 5, and 11. In addition, for at least similar reasons, it is respectfully submitted that claims depending from claims 1, 5, and 11 are similarly distinguishable from the relied upon references.

Therefore, for at least the above, it is respectfully requested that this rejection of claims 1-5 and 7-17 be withdrawn.

Claims 6 and 17 stand rejected under 35 USC 103 as being obvious over Bestler et al., Cummins et al., and Devaney, in view of Jeon; claims 18-19 stand rejected under 35 USC 103 as being obvious over Jeon and Cummins et al.; and claim 20 stands rejected under 35 USC

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103 as being obvious over <u>Jeon</u> and <u>Cummins et al.</u>, in view of <u>Devaney</u>. These rejections are respectfully respected.

As noted above, <u>Jeon</u> and the present application have the same assignee. As <u>Jeon</u> can only be a reference under 35 USC 102(e), this reference cannot be used in a 35 USC 103 rejection under 103(c).

Therefore, withdrawal of these rejections is respectfully requested.

# CONCLUSION

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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